Electric Wall Oven/Microwave—Technical Information

JMW8527DA*, JMW8530DA*, JMW9527DA*, JMW9530DA*

- Refer to Service Manual 16022821 for detailed installation, operating, testing, troubleshooting, and disassembly instructions.
- Due to possibility of personal injury or property damage, always contact an authorized technician for servicing or repair of this unit.

CAUTION

All safety information must be followed as provided in Service Manual 16022821.

WARNING

To avoid risk of electrical shock, personal injury or death; disconnect power to oven before servicing, unless testing requires it.

This oven contains ESD-sensitive electronics. An ESD discharge may weaken or damage electronic components in the oven. This could cause immediate failure or reduced product life. The following precautions must be taken when working on the oven:

- Wear an antistatic wrist strap. Connect the free end to a bare metal surface on the oven.
- Handle all electronic components by their edges only
- Do not touch contacts, terminals, or individual components on the printed circuit boards.
- Touch all anti-static bags to a bare metal surface on the oven before removing parts from their bags.
- Observe all of these precautions when dealing with old or new electronic components.

Models	**JMW8527DA***		**JMW8530DA***		**JMW9527DA***		**JMW9530DA***	
Power Source								
Electrical rating	240 VAC 6.6 kW	208 VAC 5.7 KW	240 VAC 6.6 kW	208 VAC 5.7 KW	240 VAC 6.6 kW	208 VAC 5.7 KW	240 VAC 6.6 kW	208 VAC 5.7 KW
Amperage maximum	28 Amp	28 Amp	28 Amp	28 Amp	28 Amp	28 Amp	28 Amp	28 Amp
Frequency	60 Hz		60 Hz		60 Hz		60 Hz	
Oven Wattage @ 240 V / 208 V								
Convection *	N/A	N/A	N/A	N/A	1850 W	1603 W	1850 W	1603 W
Bake	2800 W	2100 W	2800 W	2100 W	2800 W	2100 W	2800 W	2100 W
Broil	3600 W	2700 W	3600 W	2700 W	3600 W	2700 W	3600 W	2700 W
Oven Cutout Dimensions	**in.**	**cm**	**in.**	**cm**	**in.**	**cm**	**in.**	**cm**
Height	51 7/8	130.8	51 7/8	130.8	51 7/8	130.8	51 7/8	130.8
Width	25 1/2	64.8	28 1/2	72.4	25 1/2	64.8	28 1/2	72.4
Depth	24 min.	60.9	24 min.	60.9	24 min.	60.9	24 min.	60.9
Product Exterior Dimensions	**in.**	**cm**	**in.**	**cm**	**in.**	**cm**	**in.**	**cm**
Height	52 15/16	135	52 15/16	135	52 15/16	135	52 15/16	135
Width	26 3/4	68	29 3/4	76	26 3/4	68	29 3/4	76
Depth	27 7/16	62	27 7/16	62	27 7/16	62	27 7/16	62
Clearance with oven door open	21	53	21	53	21	53	21	53
Weight	**lbs.**	**kg**	**lbs.**	**kg**	**lbs.**	**kg**	**lbs.**	**kg**
Approximate shipping weight	255	116	265	120	255	116	265	120

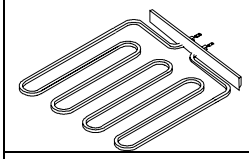
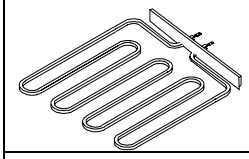
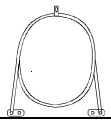
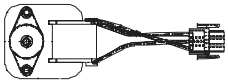
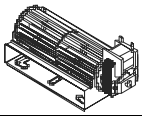
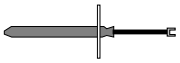
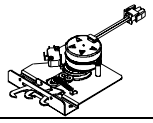
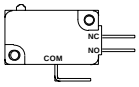
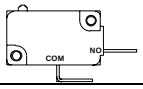
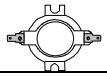
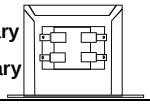
Power Source – Microwave				
Voltage AC	120 VAC	120 VAC	120 VAC	120 VAC
Amperage (Single Unit)	15 A	15 A	15 A	15 A
Frequency	60 Hz	60 Hz	60 Hz	60 Hz
Single Phase, 3 wire grounded	X	X	X	X
Power Output – Microwave				
Nominal microwave energy (IEC705)	1000 Watts	1000 Watts	1000 Watts	1000 Watts
Operating Frequency	2450 MHz	2450 MHz	2450 MHz	2450 MHz
Power Consumption				
Microwave only	1500 Watts	1500 Watts	1500 Watts	1500 Watts

©2004 Maytag Appliances Company

Wall Oven Component Testing Procedures

WARNING

To avoid risk of electrical shock, personal injury or death; disconnect power to oven before servicing, unless testing requires it.

Illustration	Component	Test Procedure	Results
	Oven light housing	Disconnect connector and test resistance of terminals..... Measure voltage at oven light	Verify bulb is plugged in properly. Indicates continuity with bulb installed. 12 VAC, see wiring diagram for terminal identification. If no voltage is present at oven light, check wiring or light switches.
	Bake element	Test continuity of terminals ..... Test voltage to terminals.....	Approximately 20 Ω - cold 240 / 208 VAC
	Broil element	Test continuity of terminals ..... Test voltage to terminals.....	Approximately 15 Ω - cold 240 / 208 VAC
	Convection element	Test continuity of terminals ..... Test voltage to terminals.....	Approximately 30 Ω - cold 240 / 208 VAC
	Convection motor fan	Verify supply voltage..... Check continuity of terminals, and verify terminals are not shorted to chassis.....	120 VAC 20Ω high and continuity low Approximately 400 Ω
	Cooling fan motor	Verify supply voltage..... Check continuity of terminals, and verify terminals not shorted to chassis	120 VAC Continuity
	Temperature sensor	Measure resistance	Approximately 1080 Ω at room temperature (70°F).
	Door lock switch 	Switch connection in following positions: Unlocked..... Locked	 COM-NO=Open, COM-NC=Closed COM-NO=Closed, COM-NC=Open
	Door switch	Remove switch from unit and measure the following points: C-NO	 Plunger in continuity, Plunger out infinite.
	High limit	Verify proper operation.	Open at 225°F, Closes at 165°F
Primary **Secondary** 	Stepdown transformer	Verify input voltage ..... Verify output voltage	Approximately 120 VAC Approximately 12 VDC

©2004 Maytag Appliances Company

Control Procedures

WARNING

To avoid risk of electrical shock, personal injury or death; disconnect power to oven before servicing, unless testing requires it.

Illustration	Component	Test Procedure	Results
UH1 Controlled	Oven temperature adjustment	Press ***SETUP*** pad. Press ***DOWN ARROW*** to scroll down to ***TEMP ADJUST***. Select oven and enter desired temperature change. Press ***ENTER*** pad to accept the change. Oven can be adjusted from -35 to +35 by pressing ***+/-*** pad. To avoid over adjusting the oven, move temperature 5 degrees each time. Wait 4 seconds for the data entry timer to expire to accept the change. Temperature adjustment will be retained even through a power failure.	While increasing or decreasing oven temperature, this does not affect broiling or self-cleaning temperature. The oven offset does not need to be readjusted if there is a power failure.
UH1 Controlled	Temperature display	Press ***SETUP*** pad. Press ***DOWN ARROW*** to scroll down to ***TEMP ADJUST.*** Select temperature scale C/F, then select ***SET***. Press ***SETUP*** pad to exit.	This mode enables the user to indicate °F or °C on the display.
UH1 Controlled	Clock Display	Press ***SETUP*** pad. Press ***CLOCK*** pad. Press ***TIME*** and enter numeric from key pad. Select ***AM*** or ***PM.*** Press ***SETUP*** to end. Press ***SETUP*** pad. Press ***CLOCK*** pad. Press ***DAY*** pad. Press back forward to select day of week. Press ***SETUP*** to end. Press ***SETUP*** pad. Press ***CLOCK*** pad. Scroll down to ***12/24 HR.*** Scroll down to ***12/24 HR*** format. Select ***SET*** to activate. Press ***SETUP*** pad to exit. Press ***DOWN ARROW*** pad to scroll to ***CLOCK.***	Set clock, day of week, or 12/24 HR clock.
UH1 Controlled	12 Hour Shutoff	Press ***SETUP*** pad. Press ***DOWN ARROW*** pad to scroll to ***12 HOUR SHUTOFF*** pad. Select ***ON*** or ***OFF***. Select ***SET*** pad to activate. Press ***SETUP*** pad to exit.	Allows the time on the clock to be toggled from 12 hour or 24 hour display.
UH1 Controlled	Demo mode	Press ***SETUP*** pad. Press ***DOWN ARROW*** pad to scroll to ***DEMO*** pad. Select ***DEMO*** to activate. Press ***SETUP*** pad to exit.	Control will automatically cancel any cooking operation and remove all relay drives 12 hours after the last pad touch.
UH1 Controlled	Energy Saver	Press ***SETUP*** pad. Press ***DOWN ARROW*** pad to scroll to ***ENERGY SAVER*** pad. Select ***ON*** or ***OFF***. Select ***SET*** pad to activate. Press ***SETUP*** pad to exit.	To save energy, the display will turn off after five minutes of no use in time of day mode only.
UH1 Controlled	208/240 V mode	Press ***SETUP*** pad. Press ***DOWN ARROW*** pad to scroll to ***208/240 V*** pad. Select ***208*** or ***240.*** Select ***SET*** pad to activate.	For improved results when using Radiant Bake only, the oven can be set from 240 V to 208 V.

©2004 Maytag Appliances Company

Control Procedures

WARNING

To avoid risk of electrical shock, personal injury or death; disconnect power to oven before servicing, unless testing requires it.

Illustration	Component	Test Procedure	Results
UH1 Controlled	Sabbath Mode	Press ***SETUP*** pad. Press ***DOWN ARROW*** pad. Press ***SABBATH*** pad to activate Sabbath mode. Select ***AUTO*** or ***MANUAL*** pad. If ***AUTO*** selected, press continue. If ***MANUAL*** selected, press ***ON*** or ***OFF.*** Select ***SET*** pad. The time of day and day of week must be set correctly for this feature to be activated.	**Auto-Sabbath mode** will display a reminder at 2:00 PM on Friday. **Manual-Sabbath mode** will be instantly programmed for 72 hours. This mode disables the normal 12 hour energy saving mode.
UH1 Controlled	Control Lockout	Press and hold ***BACK*** and ***ENTER*** pads for 5 seconds. To reactivate the control, press and hold ***BACK*** and ***ENTER*** pads for 5 seconds.	This is a safety feature that can be used to prevent accidentally programming the oven. It disables the electronic oven control and locks the cavity door(s). Control lockout features must be reset after a power failure.

Service Mode

Follow procedure below to use the Test Mode.

1. Press ***SETUP*** pad.
2. Press ***DOWN ARROW*** pad three times until ***SERVICE*** is displayed.
3. Press ***SERVICE*** pad.
4. Press and hold ***BACK*** and ***ENTER*** pads for 5 seconds.
5. Press ***SERVICE*** pad.

NOTE: If the oven cavity temperature is greater then 400F, the Test Mode cannot be activated or will abort the mode if activate

NOTE: Once the Service Mode is activated the control will activate the relay until the pad is pressed again.

Pad Pressed	Relay or Action Activated
Beep	1 Second Beep
Version	Version of software
Last Fault	Display last error code and oven configuration (single, double, convection, nonconvection)
DISP Test	Display segments
UBAKE	Upper Bake Element
UBROIL	Upper Broil Element
UCONV	Upper Convection Element
UCOOL	Upper Cooling Fan
UCONV-H	Upper High Speed Convection Fan
UCONV-L	Upper Low Speed Convection Fan
UMDL	Upper Motorized Door Lock
ULITE	Upper Oven Light
LBAKE	Lower Bake Element
LBROIL	Lower Broil Element
LCONV	Lower Convection Element
LCOOL	Lower Cooling Fan
LCONV-H	Lower High Speed Convection Fan
LCONV-L	Lower Low Speed Convection Fan
LMDL	Lower Motorized Door Lock
LLITE	Lower Oven Light

©2004 Maytag Appliances Company

Control Procedures

WARNING

To avoid risk of electrical shock, personal injury or death; disconnect power to oven before servicing, unless testing requires it.

Description of Error Codes

Error diagnostic codes can only be viewed by entering the Diagnostic Code Display Mode.
Each error code is four digits long and is created based on the following table.

Digit	Description
1st	Primary System: 1 – Local to the control circuit board 3 – Sensor or meat probe 4 – Control input 9 – Door lock
2nd	Measurable: d – Diagnostic failure: measurable parameter c – Control related error, replace control
3rd	Primary failure mechanism
4th	Oven Cavity: 1 – Upper oven (or single cavity oven) 2 – Lower oven c – Control specific

Code	Description	When Checked	Debounce
1d11	Runaway temp, door unlocked (single cavity or upper oven)	Latch unlocked	1 min
1d12	Runaway temp, door unlocked (lower oven)	Latch unlocked	1 min
1d21	Runaway temp, door locked (single cavity or upper oven)	Latch locked	1 min
1d22	Runaway temp, door locked (lower oven)	Latch locked	1 min
1c1c	Shorted key	Always	1 min
1c2c	Keyboard tail disconnected (single cavity or upper oven)	Always	1 min
1c31	Cancel key circuit (single cavity or upper oven)	Always	1 min
1c32	Cancel key circuit (lower oven)	Always	1 min
1c4c	Micro communication failure	Always	1 min
1c5c	Vcc or ground open circuit	Cook or clean programmed	1 min
1c6c	EEPROM error	Cook or clean programmed	3 tries
1c7c	Control not calibrated	Always	10 sec
1c8c	Cooking profile corrupted in EEPROM	Cook or clean programmed	3 tries
3d11	Sensor open (single cavity or upper oven)	Cook or clean programmed	10 sec
3d12	Sensor open (lower oven)	Cook or clean programmed	10 sec
3d21	Sensor shorted (single cavity or upper oven)	Cook or clean programmed	10 sec
3d22	Sensor shorted (lower oven)	Cook or clean programmed	10 sec
3d31	Meat probe open (single cavity or upper oven)	Probe cook programmed	10 sec
3d41	Meat probe open (single cavity or upper oven)	Probe cook programmed	10 sec
4d11	Door switch input clean (single cavity or upper oven)	Clean programmed	1 min
4d12	Door switch input clean (lower oven)	Clean programmed	1 min
4d21	No cool fan rotation (no RPM) (single cavity or upper oven)	Always	1 min
4d22	No cool fan rotation (no RPM) (lower oven)	Always	1 min
4d31	Fan state error (on when supposed to be off) (single cavity or upper oven)	Always	30 sec
4d32	Fan state error (on when supposed to be off) (lower oven)	Always	30 sec
4d41	Low cooling fan rotation (only when fan is supposed to be on) (single cavity or upper oven)	Always	30 sec
4d42	Low cooling fan rotation (only when fan is supposed to be on) (lower oven)	Always	30 sec
9d11	Latch will not lock (single cavity or upper oven)	Latch should be locked	2 min
9d12	Latch will not lock (lower oven)	Latch should be locked	2 min
9d21	Latch will not unlock (single cavity or upper oven)	Latch should be locked	2 min
9d22	Latch will not unlock (lower oven)	Latch should be locked	2 min
9d31	Latch both locked and unlocked (single cavity or upper oven)	Always	2 min
9d32	Latch both locked and unlocked (lower oven)	Always	2 min
9d41	Latch neither locked nor unlocked (single cavity or upper oven)	Always	2 min
9d42	Latch neither locked nor unlocked (lower oven)	Always	2 min

©2004 Maytag Appliances Company

Control Procedures

WARNING

To avoid risk of electrical shock, personal injury or death; disconnect power to oven before servicing, unless testing requires it.

Diagnostic Code Handling (ADD ENTIRE PAGE TO SERVICE MANUAL ONLY)

Code	Measurable	What is Displayed	Action Taken By Control
1d11	Runaway temp, door unlocked (single cavity or upper oven)	1 (active cook mode) 2 (data entry; cook) 3 (time of day)	Disable element and convection element
1d12	Runaway temp, door unlocked (lower oven)	1 (active cook mode) 2 (data entry; cook) 3 (time of day)	Disable element and convection element
1d21	Runaway temp, door locked (single cavity or upper oven)	1 (active cook mode) 2 (data entry; cook)	Disable element and convection element
1d22	Runaway temp, door locked (lower oven)	1 (active cook mode) 2 (data entry; cook)	Disable element and convection element
1c1c	Shorted key	None	Disable key and tone for that key
1c2c	Keyboard tail disconnected	None	None
1c31	Cancel key circuit (single cavity or upper oven)	1 (active cook or clean mode) 2 (data entry; cook or clean mode)	Disable element and convection element
1c32	Cancel key circuit (lower oven)	1 (active cook or clean mode) 2 (data entry; cook or clean mode)	Disable element and convection element
1c4c	Micro communication failure	None	None
1c5c	Vcc or ground open circuit	None	None
1c6c	EEPROM error	None	None
1c7c	Control not calibrated	None	None
1c8c	Cooking profile corrupted in EEPROM	None	None
3d11	Sensor open (single cavity or upper oven)	1	Disable element and convection element
3d12	Sensor open (lower oven)	1	Disable element and convection element
3d21	Sensor shorted (single cavity or upper oven)	1	Disable element and convection element
3d22	Sensor shorted (lower oven)	1	Disable element and convection element
3d31	Meat probe open (single cavity or upper oven)	1 (active probe mode) 2 (data entry; probe)	Disable element and convection element
3d41	Meat probe open (single cavity or upper oven)	1 (active probe mode) 2 (data entry; probe)	Disable element and convection element
4d11	Door switch input clean (single cavity or upper oven)	1 (active clean mode)	Disable element and convection element
4d12	Door switch input clean (lower oven)	1 (active clean mode)	Disable element and convection element
4d21	No cool fan rotation (no RPM) (single cavity or upper oven)	1 (active cook or clean mode) 2 (data entry; cook or clean mode)	Disable element and convection element
4d22	No cool fan rotation (no RPM) (lower oven)	1 (active cook or clean mode) 2 (data entry; cook or clean mode)	Disable element and convection element
4d31	Fan state error (on when supposed to be off) (single cavity or upper oven)	None	None
4d32	Fan state error (on when supposed to be off) (lower oven)	None	None
4d41	Low cooling fan rotation (only when fan is supposed to be on) (single cavity or upper oven)	None	None
4d42	Low cooling fan rotation (only when fan is supposed to be on) (lower oven)	None	None

©2004 Maytag Appliances Company

Control Procedures

WARNING

To avoid risk of electrical shock, personal injury or death; disconnect power to oven before servicing, unless testing requires it.

(ADD ENTIRE PAGE TO SERVICE MANUAL ONLY)

Code	Measurable	What is Displayed	Action Taken By Control
9d11	Latch will not lock (single cavity or upper oven)	1	Disable element and convection element
9d12	Latch will not lock (lower oven)	1	Disable element and convection element
9d21	Latch will not unlock (single cavity or upper oven)	1 (active cook mode) 2 (data entry; cook)	Disable element and convection element
9d22	Latch will not unlock (lower oven)	1 (active cook mode) 2 (data entry; clean)	Disable element and convection element
9d31	Latch both locked and unlocked (single cavity or upper oven)	1 (active cook mode) 2 (data entry; clean)	Disable element and convection element (In clean only)
9d32	Latch both locked and unlocked (lower oven)	1 (active cook mode) 2 (data entry; clean)	Disable element and convection element (In clean only)
9d41	Latch neither locked nor unlocked (single cavity or upper oven)	1 (active cook mode) 2 (data entry; clean)	Disable element and convection element (In clean only)
9d42	Latch neither locked nor unlocked (lower oven)	1 (active cook mode) 2 (data entry; clean)	Disable element and convection element (In clean only)

©2004 Maytag Appliances Company

Microwave Component Testing Procedures

WARNING

To avoid risk of electrical shock, personal injury or death; disconnect power to oven before servicing, unless testing requires it.

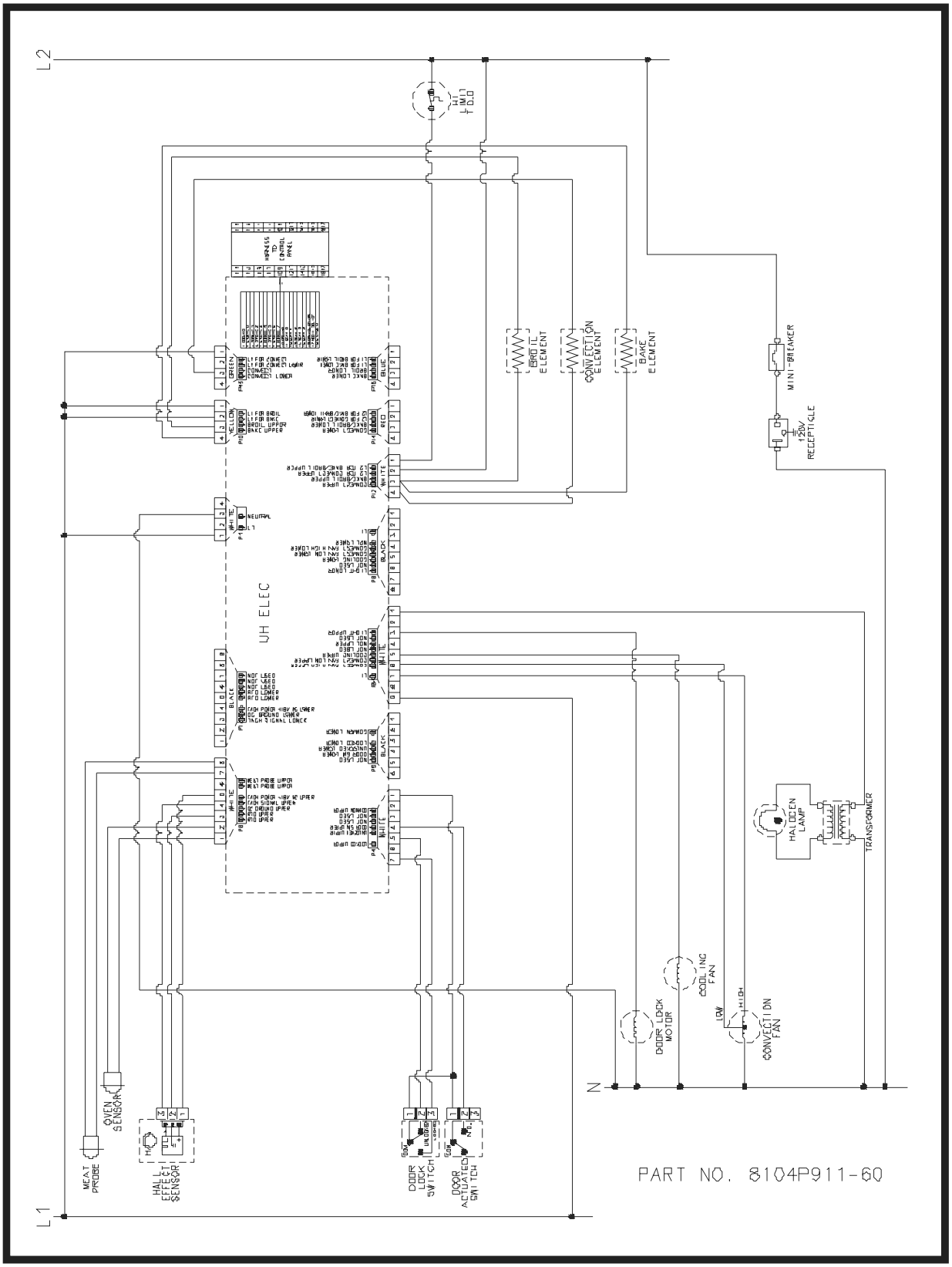
Illustration	Component	Test Procedure	Results
	Oven light and socket	Test continuity of receptacle terminals. Measure voltage at oven light	Indicates continuity with bulb screwed in. 120 VAC; see wiring diagram for terminal identification. If no voltage is present at oven light check wiring.
	Transformer	**Discharge Capacitor** Remove all wires from terminals. Measure resistance from: Primary Terminals ..... Secondary Terminals.....	 Less than 1 Ω Approximately 85 Ω
	Turntable	Remove all wires from terminals. Measure resistance from: Terminal to terminal	 Approximately 2238 Ω
	Magnetron	**Discharge Capacitor** Remove wires from magnetron and connect ohmmeter to terminals. Also check between each terminal and ground.	Between Terminals: Less than 1 Ω Each terminal to ground measures Infinite resistance. **Note:** This test is not conclusive. If oven does not heat and all other components test good replace the magnetron and retest.
	Thermal cutout	Disconnect all wires from TCO. Measure resistance across terminals. Magnetron TCO..... Cavity TCO.....	 Open at 230°F (110°C) and closed at 194°F (90°C) Opens at 320°F (160°C)
Monitor Secondary Primary	Interlock switch	Disconnect wires to switch. With door open measure resistance from: Monitor..... Secondary ..... Primary ..... With door closed measure resistance from: Monitor..... Secondary..... Primary	 Indicates continuity Infinite Infinite Infinite Indicates continuity Indicates continuity
	Capacitor	**Discharge Capacitor** Remove wires from capacitor terminals and connect ohmmeter, set on highest resistance scale to terminals. Also check between each terminal and capacitor case.	 Between Terminals: Meter should momentarily deflect towards zero then return to over 5 MΩ. If no deflection occurs, or if continuous deflection occurs, replace capacitor. Terminal to Case: Infinite resistance
	Fan Motor	Remove all wires from motor. Measure resistance across coil.....	 Approximately 63.6 Ω

©2004 Maytag Appliances Company

Wall Oven Wiring Diagram and Schematic

WARNING

To avoid risk of electrical shock, personal injury or death; disconnect power to oven before servicing, unless testing requires it.

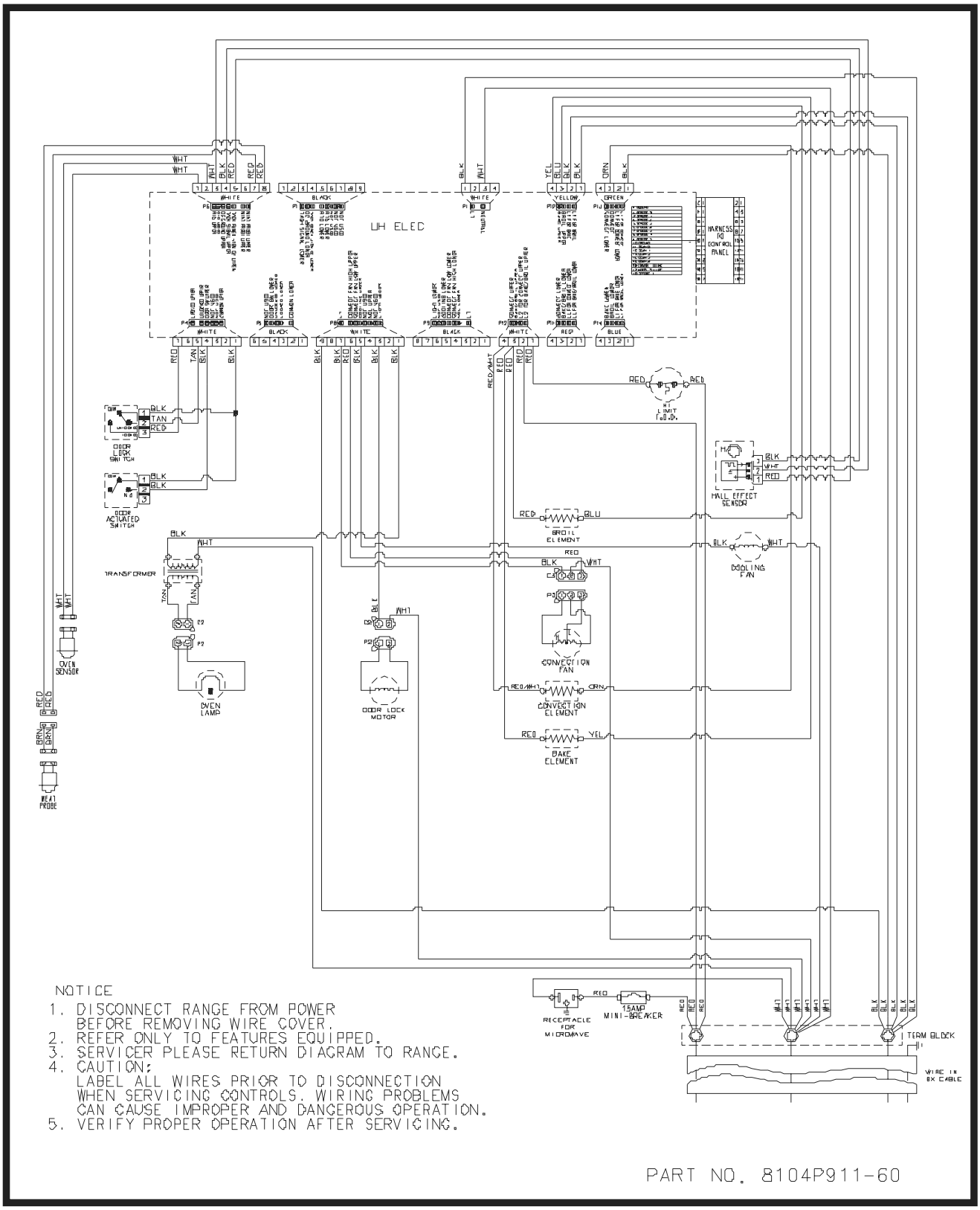


©2004 Maytag Appliances Company

Wall Oven Wiring Diagram and Schematic

WARNING

To avoid risk of electrical shock, personal injury or death; disconnect power to oven before servicing, unless testing requires it.

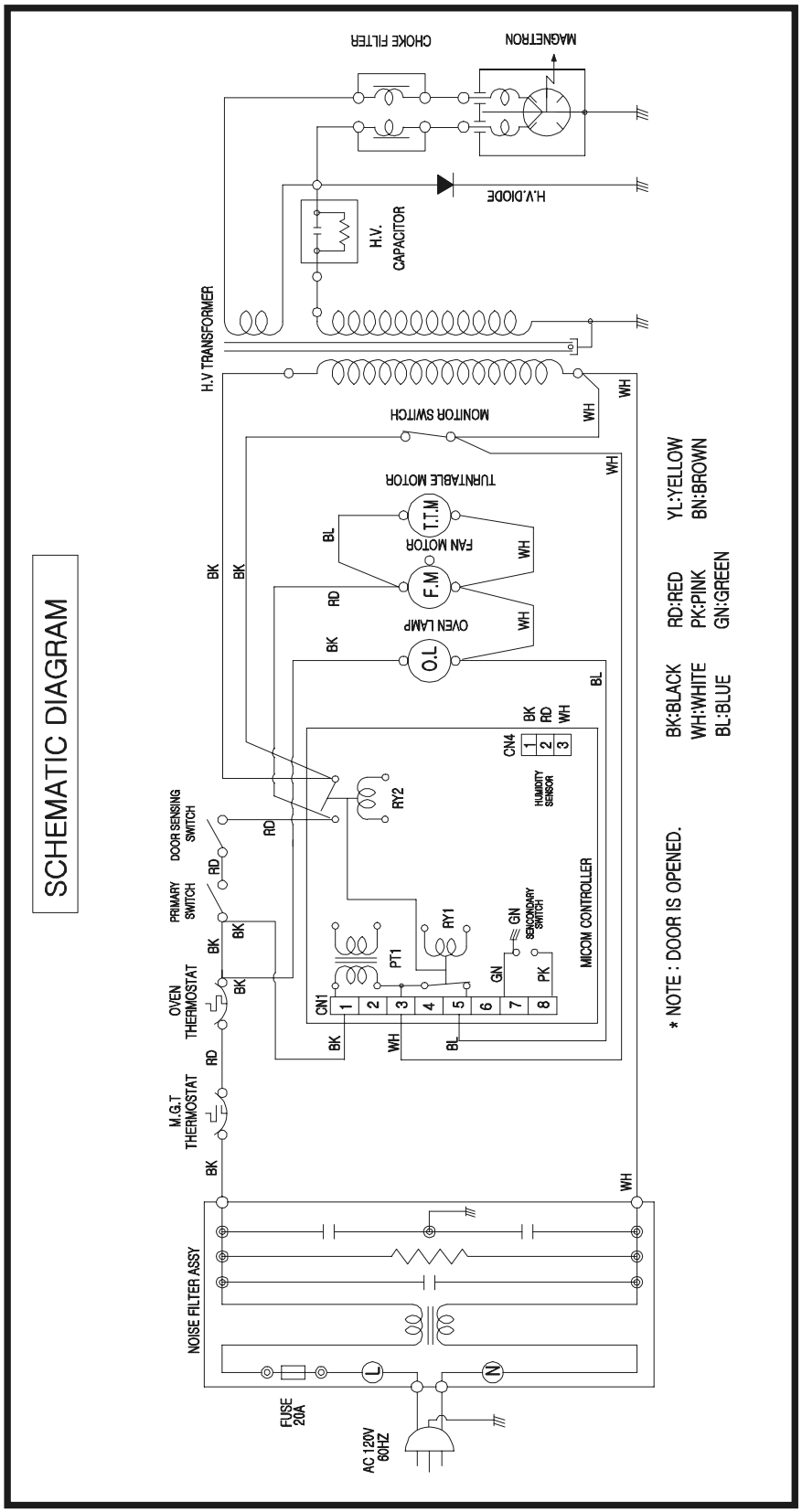


©2004 Maytag Appliances Company

Microwave Wiring Diagram and Schematic

WARNING

To avoid risk of electrical shock, personal injury or death; disconnect power to oven before servicing, unless testing requires it.



©2004 Maytag Appliances Company